ABSTRACT

A method is presented for increasing data throughput in a communications channel comprising the steps of selecting a first data packet from a queue of data packets to be transmitted over a communications channel, modulating said first data packet using a first modulation scheme, selecting a second data packet from a queue of data packets to be transmitted over the communications channel, modulating the second data packet using a second modulation scheme overlaying the first data packet on a symbol by symbol basis, transmitting the first data packet overlaid with second data packet over the communications channel, determining whether the first data packet was received by monitoring using the first modulation scheme for an acknowledgment for the first data packet before expiration of a timeout period, determining whether the second data packet was received by monitoring using the first modulation scheme for an acknowledgment for the second data packet before expiration of the timeout period and repeating the steps outlined above, if acknowledgments were received for both the first and the second data packets. A system is presented for increasing data throughput in a communications channel comprising means for implementing the process outlined above.